Headquarters U.S. Air Force

Integrity - Service - Excellence

AF Logistics Transformation & The "Way Ahead"

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AF/ILGP

3 Sep 03
To AMC LRC

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The Logistics Mission

- **What We Do:**
  - **Get the force to the fight**
  - **Keep the force in the fight**
  - **Prepare the force for the next fight**
- **The Effect We Produce**
  - **Providing the right stuff, at the right time and place—*every time***

Global Expeditionary Operations for the 21st Century

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Why We Need to Transform AF Logistics

- Logistics must evolve with global operational doctrine & CONOPS
- Current processes are NOT broken, but we can do SIGNIFICANTLY better
  - Operational Performance
  - Affordability
- Improvements limited by current business and IT architecture
  - Must change the underlying model / foundation
- Requires revolution in thinking and action
  - Cross organization/functional, enterprise wide integration
  - Benchmarks and tools readily available

We've reached the fork in the logistics road!

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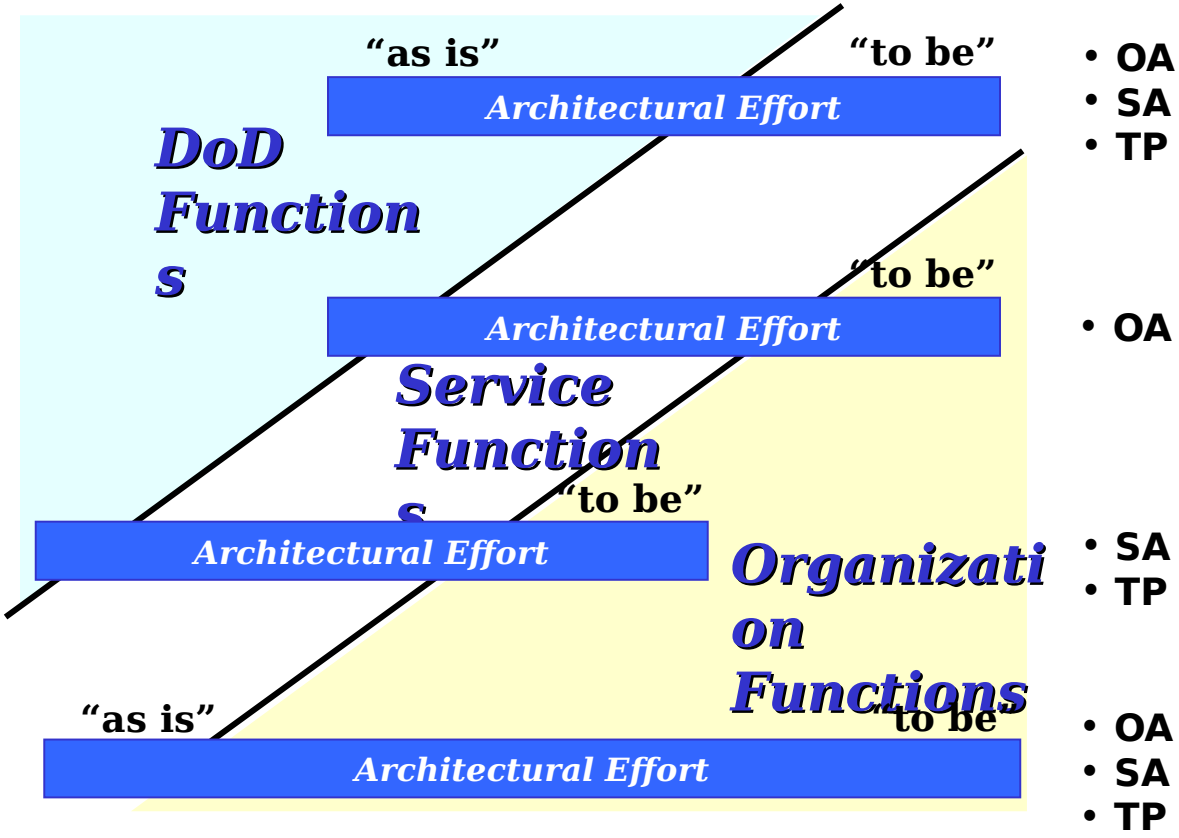
Current AF Logistics Environment

- **Disparate on-going initiatives**
  - **All are moving toward *good* goals, but the goals are not *common* goals (puzzle pieces)**
    - **Improved Wing Logistics – CLR/CWO, Sep 99**
    - **Improved Parts Availability – Spares Campaign, Feb 01**
    - **Modern, Viable Depots – DMRT, Jul 01**
- **No comprehensive plan for integration**
  - **No common awareness or understanding of corporate goals and how initiatives must integrate to meet these goals**
- **No discipline**
  - **Individual stake-holders are unwilling to wait for or buy into the common framework – counterproductive activity arises**
- **Existing Architectural direction and efforts at DoD and AF level**
  - **Multiple architectures are being developed at the OSD level, AF level, Command Level, and Air Staff level**

Current EA Environment

At present, there are myriad architecture efforts being undertaken at various levels across the DoD and Air Force



Each addresses various aspects of logistics, and approaches enterprise architecture from a different perspective

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Overarching AF Transformation Strategy

- Continue to **aggressively pursue innovation** to lay the groundwork for transformation
- **Adapt Air Force organization** to facilitate transformation and institutionalize cultural change
- Shift from threat- and platform-centric planning and programming to **capabilities and effects-based planning and programming** via the **new Air Force CONOPS**
- Work with the other Services and the Joint Staff to develop **new joint operating concepts** as directed by the Transformation Planning Guidance (TPG)
- **Break out of industrial age business processes** and embrace information age thinking

(Source: Draft Air Force Transformation Flight Plan)

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Using Overarching Goals to Drive Change

- **Everything we do and dollars we spend must be measured in terms of meeting availability and cost goals**
  - **20% increase in aircraft availability within the next three years**
  - **Zero real O&S cost growth over the FY04-09 FYDP**
  - **Subordinate goals must tie to overall targets**
- **Everyone in AF logistics must be held accountable for meeting their share of the goals**
  - **Rewards must be tied to goal achievement**
- **Keep it simple and direct**

Bring the team together—unleash the power

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Future AF Supply Chain Environment

TODAY

Organic

Item Management

TOMORROW

10-15 Year Transition

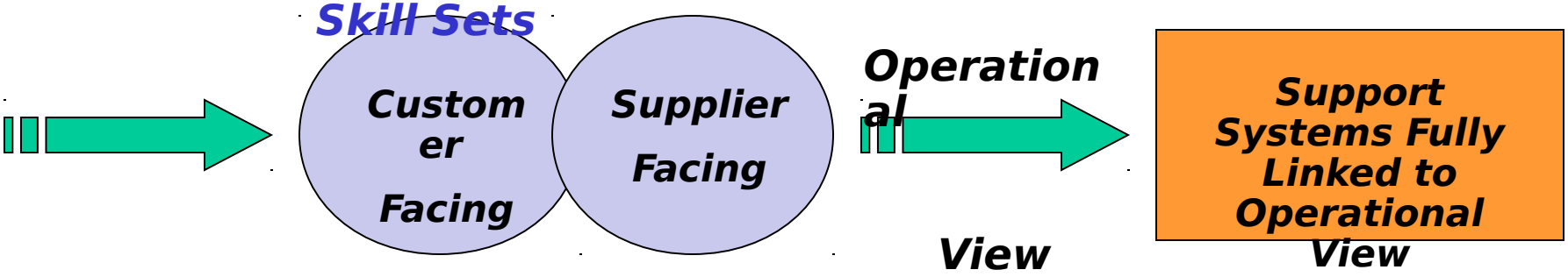
TSSR/CLS/PBL

Business Base & Practices Changing Over Time

NSN/Commodity focus/skills decreasing

W/S Supply Chain Integration focus/skills increasing

Transition Smartly & Focus on Improved Skill Sets



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Focusing on the Enterprise

- **AF logistics *Enterprise* processes**
  - **Planning: Forecasting, Production Planning, Inventory Planning, Maintenance Planning …**
  - **Supply: Distribution, Vendor Management, Inventory Balancing …**
  - **Maintenance: Production Management, Shop Floor Control …**
  - **Transportation: Transportation Management …**
- **Across AF organizational boundaries**
  - **MAJCOMs**
  - **ALCs**
  - **Air Staff**
  - **DoD and vendors**
- **Considers domain intersections**
  - **Installations**
  - **Financial**
  - **Acquisition**
  - **Human Resources**

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Defining an Enterprise Architecture (EA)

- **The explicit description and documentation of the current and desired relationships among business and management processes and information technology. (OMB)**
- **Specifically, the LogEA will:**
  - **Create a single authoritative source that clearly defines the operating and systems models;**
  - **Provide vehicle to ensure transformation coordination across the AF and outside the AF;**
  - **Define actionable Transition Plan;**
  - **Establish a platform for managing change across the Logistics enterprise.**
  - **Meet future POM requirements (BMMP / BMEA)**
  - **Baseline for future fiscal decisions**
  - **Logistics Enterprise Governance**
  - **Undertake Portfolio Management**

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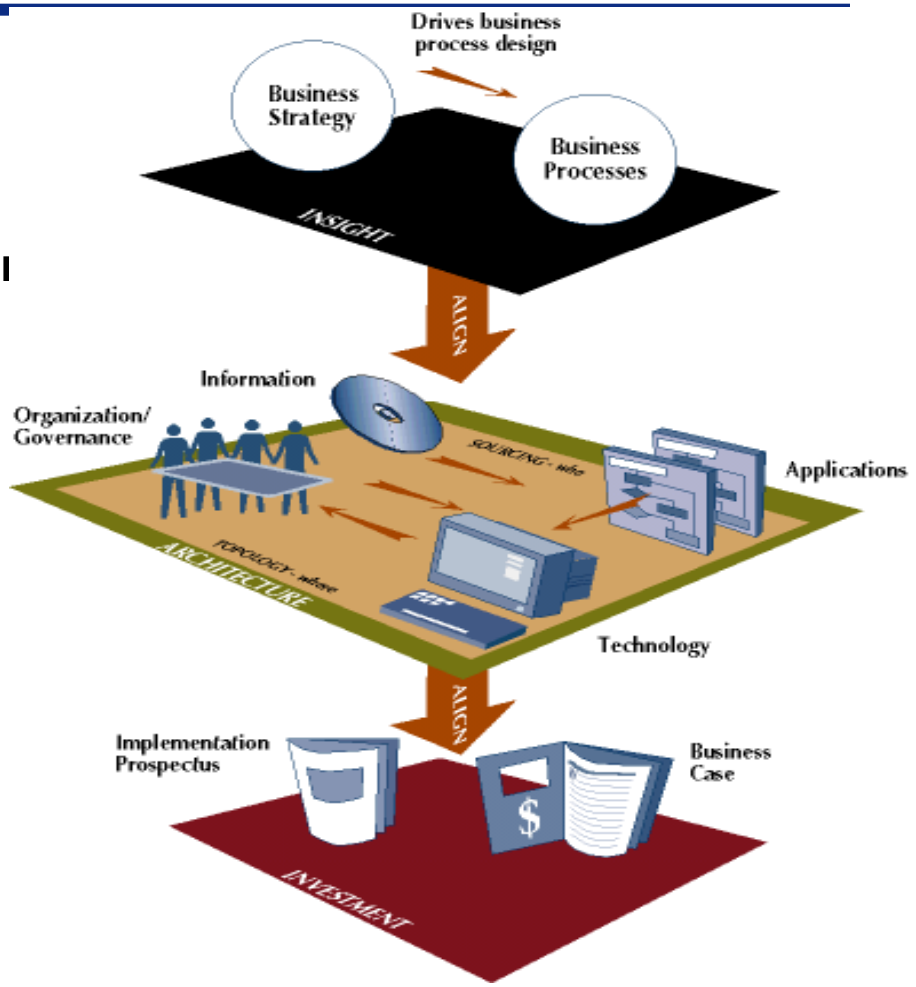
Components of Architecture

- Vision / Strategy
- Operational Architecture (OA)
  - Policy (Constraints / Requireme
  - Processes (Organization)
  - People (Resources)
- Systems Architecture (SA)
  - Enabling Technology
    - COTS and Legacy
  - Mapping of Systems to OA
  - Data Layer
- Transition Plan (TP)
  - Courses of Action (COAs)
  - Implementation Governance



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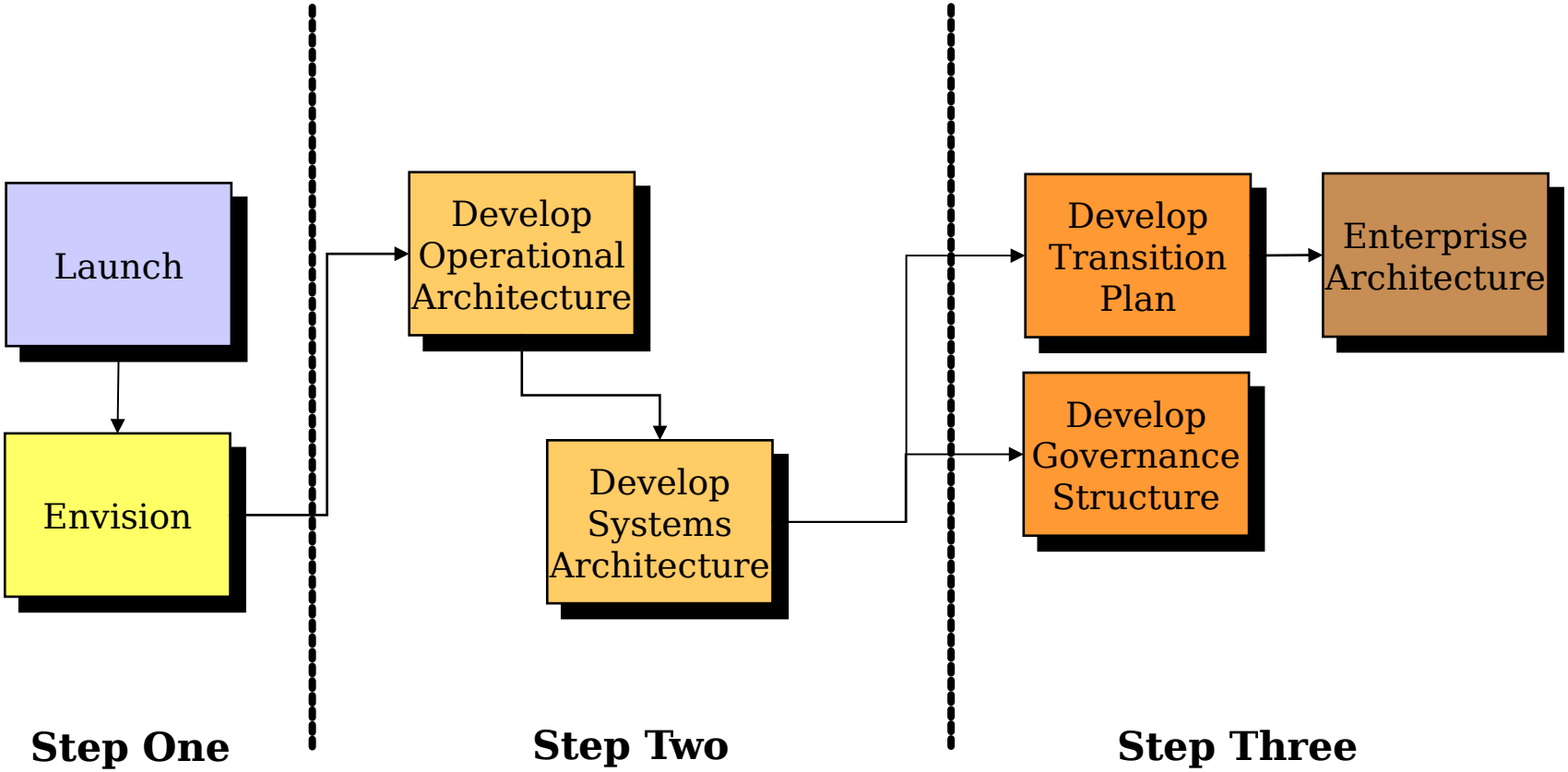
High-Level Approach



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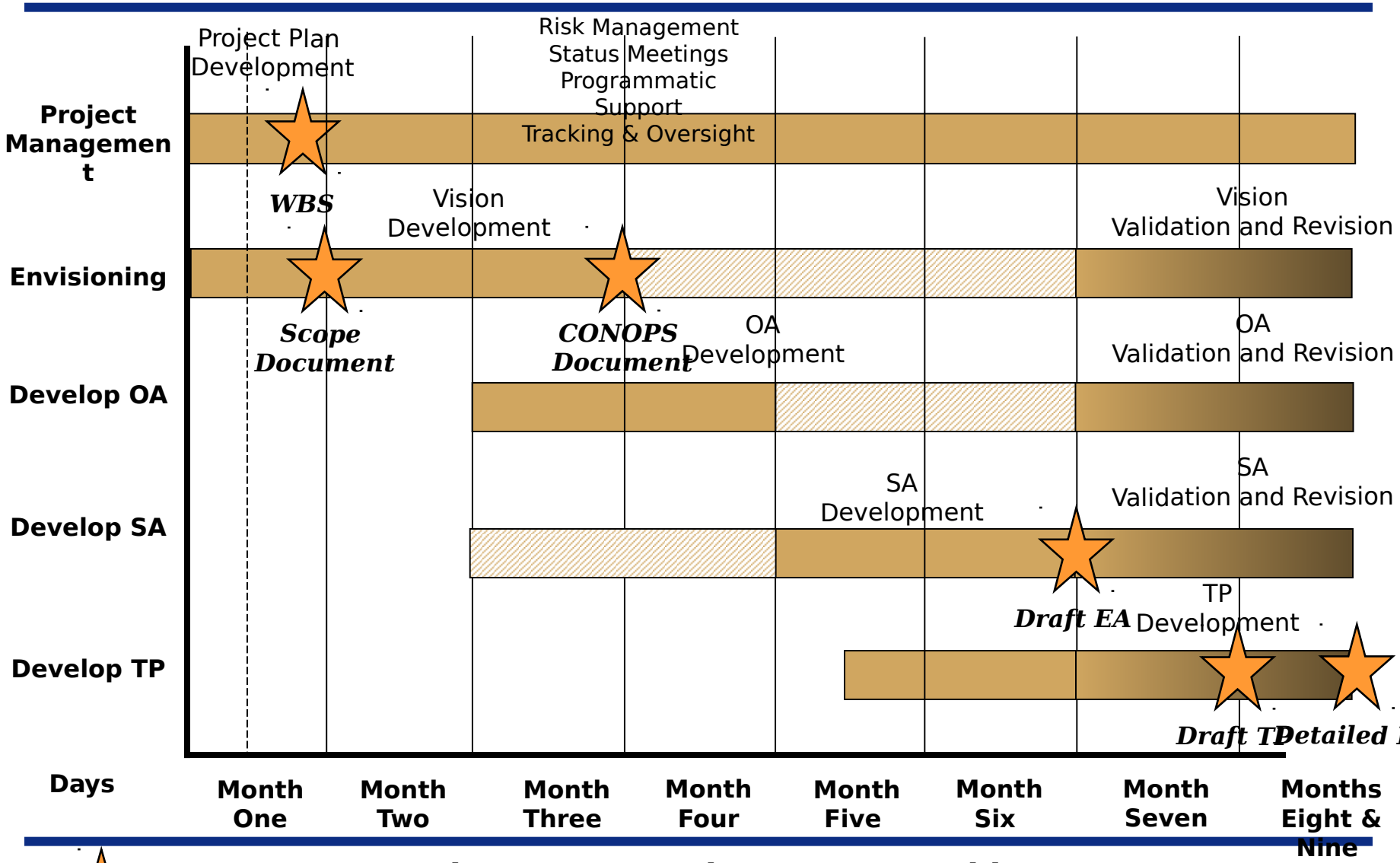
Stakeholders

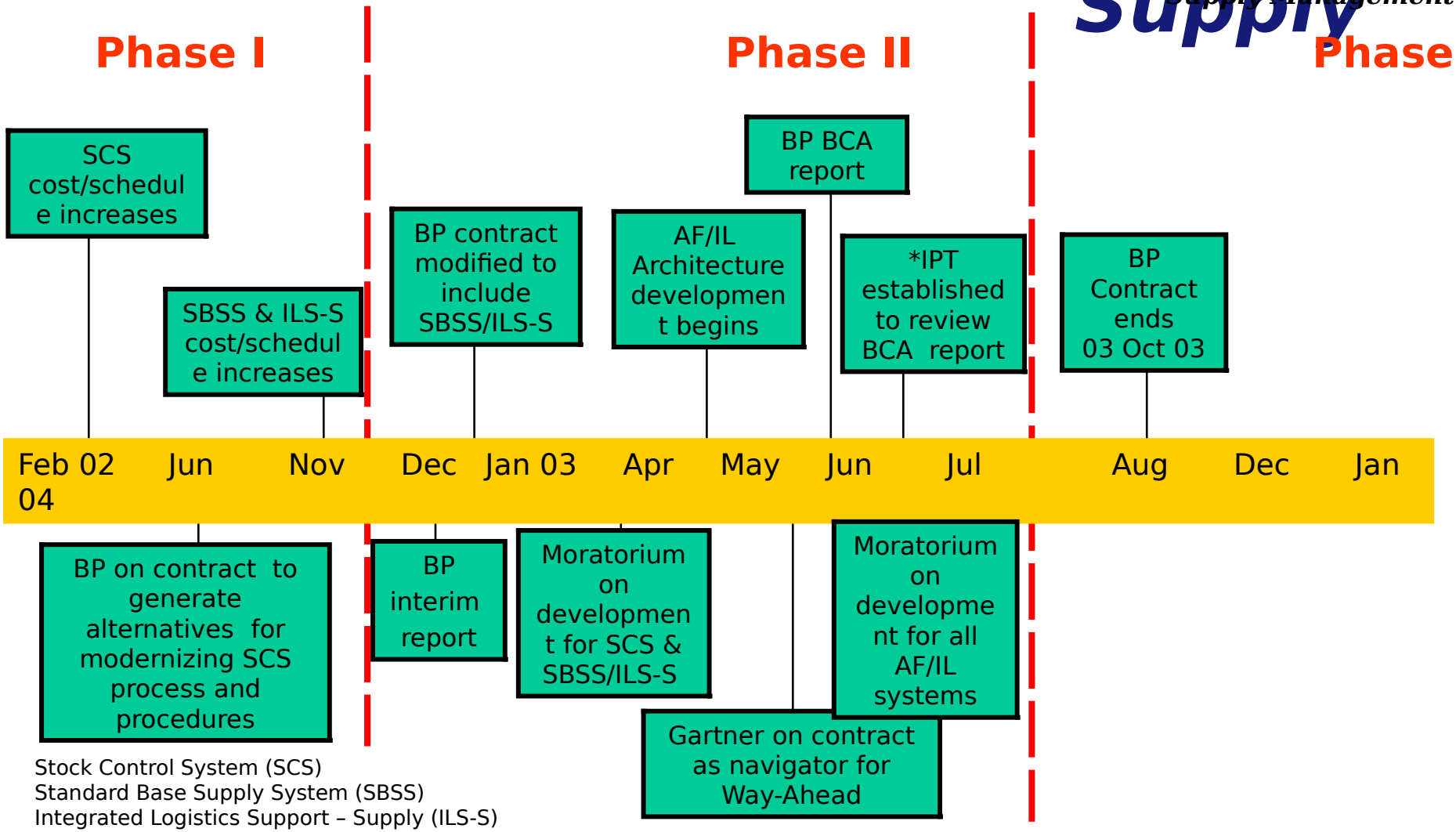
- **Architecture Executive Group**
  - **SAF/IE, AF/IL, AFMC/CC, ACC/CV, AMC/CV, SAF/AQ, (AF CIO Advisor)**
- **Architecture Steering Group**
  - **AF/ILI + ILM, ILG, and ILP, SAF/AQC, AFMC/LG, ACC/LG, AMC/LG (AFPEO Advisor)**
- **Architecture Team**
  - **AF/ILI leader plus dedicated SME team from each member of the steering group staff for 60 days or until complete**
- **System Team**
  - **AF/ILI & AF/PEO + IL/SPO, system POCs from each functional ILM/G, AFMC:LGN, AMC, ACC & AF/ILC**

High-Level Timeline



The “Way Ahead” for Supply Systems

Background Enterprise Solution – Supply Management



Stock Control System (SCS)
Standard Base Supply System (SBSS)
Integrated Logistics Support – Supply (ILS-S)
BearingPoint (BP)

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BP Initial Phase II Study

- **Identified and defined seven (7) alternative approaches**
  - **Status Quo**
  - **Modernization**
  - **Modernization with EAI**
  - **Custom Development**
  - **Package Based**
  - **ERP Backbone**
  - **ERP**
- **Preliminary evaluation and screening of alternatives**
  - **Functional Capabilities**
  - **Enterprise Integration**
  - **Systems / Application Integration**
  - **Other Mandates**
- **Narrowed to four alternatives**
  - **Modernization with EAI**
  - **Package Based**
  - **ERP Backbone**
  - **ERP**

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Business Case Analysis Findings: Summary

Factor Weighted Points	Analysis Category	Weighted Points Available	Weighted Points Achieved			
			Modernize with EAI	Package Based	ERP Backbone	ERP
30	Functional Capabilities	15	11.7	13.0	13.3	11.3
	Functional Effectiveness	15	8.3	9.3	11.7	10.7
25	Enterprise Integration	10	6.5	6.8	7.8	8.5
	System/Application Integration	7.5	4.4	5.6	5.8	6.2
	Other, Federal, DoD and AF Mandates	7.5	4.2	5.4	6.1	6.5
15	Process	5	2.8	2.2	2.2	2.2
	Organizational Structure	5	3.5	2.8	2.4	2.4
	Workforce	5	3.1	2.4	2.0	2.0
15	Technical Demands	3	1.8	2.0	2.7	2.8
	Organizational Environment	3	2.4	1.6	1.7	1.7
	Schedule/Accuracy Sensitivity	3	1.5	1.0	1.5	1.5
	Budget/Cost Accuracy and Sensitivity	3	2.2	1.8	1.8	2.2
	Functional Performance	3	2.3	2	2	2.1
15	Return on Investment	10	0.0	0.0	2.0	2.0
	Total Cost of Ownership	5	2.0	3.0	4.0	5.0
100	**Total Weighted Points Achieved**		56.7	58.9	67	67.1

BP Recommendation: ERP or ERP-BB

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BCA Findings: Benefit / Cost Analysis

- **Lifecycle Cost Estimate (CY$)**

Cost Element	Cost to FOC +10			
	Modernize with EAI	Package Based	ERP Backbone	ERP
Application SW License	$0	$38,016,000	$31,680,000	$28,800,000
Other SW License (EAI, etc.)	$8,743,680	$8,743,680	$6,048,000	$6,048,000
COTS Software Maintenance	$25,269,235	$103,338,893	$76,965,120	$71,089,920
SW Development	$208,371,974	$0	$0	$0
Functional Support	$12,000,000	$12,000,000	$9,000,000	$9,000,000
Implementation	$33,000,000	$65,600,000	$50,142,857	$50,142,857
Change Management	$10,890,000	$34,636,800	$29,784,857	$33,094,286
Training	$11,220,000	$22,304,000	$17,048,571	$17,048,571
Sustainment	$457,124,804	$117,599,804	$88,342,476	$88,342,476
Program Management	$304,398,000	$163,272,000	$141,783,000	$141,783,000
Professional Services	$7,800,000	$78,000,000	$63,000,000	$60,000,000
Version upgrades (Major/ Minor)	$0	$36,762,240	$29,092,886	$30,085,714
DISA Support for Operations	$352,952,047	$280,110,360	$189,869,512	$189,869,512
Total	**$1,431,769,740**	**$960,383,777**	**$732,757,279**	**$725,304,336**

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IPT Activities

- Analyzed the BP BCA 27 June 03 report and reconciled it to the agreed upon framework
- Challenged BP's assumptions and adjusted evaluation criteria scores and weighting
- Corrected errors in cost estimates and scope of study
  - Proposed definition of ERP doesn't match analysis
  - Scope of study doesn't match between pictorial representation, narrative in the study, and discussion with BP
- Identified risks, AF action items, and critical issues to be addressed moving forward

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Overall Conclusions

- **ERP based alternatives demonstrated overall strongest performance. Best for:**
  - **Satisfying functional needs and positively impacting supply measures of effectiveness**
  - **Integration of data and processes**
  - **Leveraging leading edge technology**
  - **Supporting 'supply chain' strategic goals and objectives**
  - **Balancing modernization, process improvements, organizational impacts, and program risk**
  - **Managing life cycle costs and achieving a return on investment**
- **No clear difference between ERP and ERP Backbone options**
- **Sensitivity analysis …. ERP Backbone preferred solution**
- **Effort and cost may be under-estimated**
- **Bottom Line . . .AF/IL should accept BP report as modified as starting point for Implementation of an AF Enterprise Solution**

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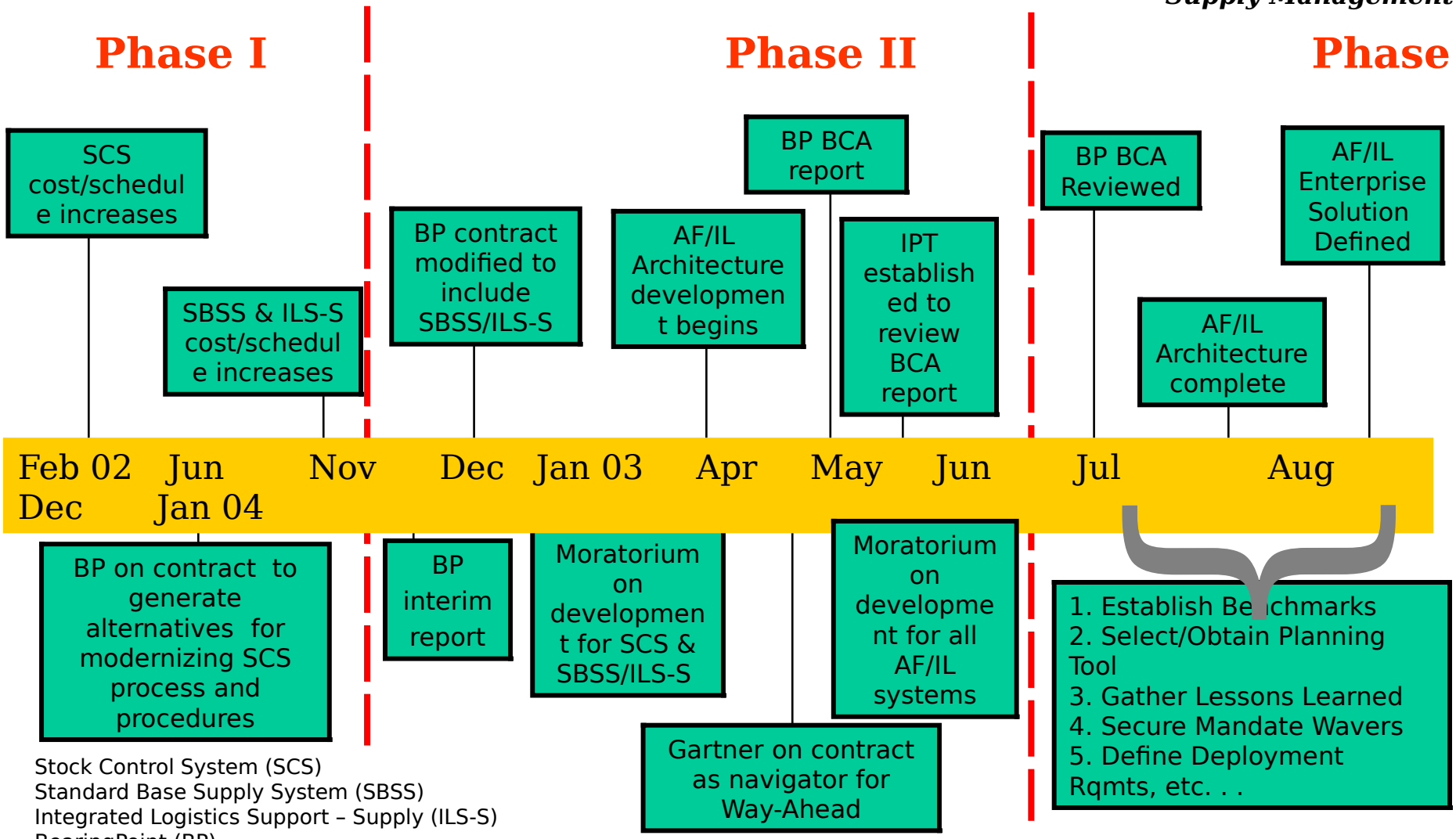
ERP Functional Capabilities Broader than Supply Management

Enterprise Solution – Supply Moving Forward

Supply Management



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Summary

- Lots of changes are in the making……
  - The world as we know it will change
    - And it will be for the better